To determine if subject matter taught or years of teaching experience after taking methods courses influenced teacher attitudes toward teaching reading in the content areas, questionnaires were completed by 105 middle, junior, and senior high school teachers who had completed methods classes in content area reading. Results of four subscales on teacher attitudes toward content area reading issues, benefits, use, and significance indicated that teacher attitudes, while positive, were not strong enough to initiate use of reading strategies in their classrooms. A comparison of teacher groups showed that teachers whose subject matter demanded more reading, such as English or social studies, placed the most value on content area reading strategies. Results also revealed that less experienced teachers had better attitudes than the more experienced group, indicating the need for more widespread implementation of the inservice model developed by Dupuis, Askov, and Lee (1978). (MM)
EFFECTS OF A CONTENT AREA READING CLASS
ON ATTITUDES AND PRACTICES OF SECONDARY TEACHERS

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Over the last fifteen years reading educators have convinced state legislators of the need for secondary pre-service teachers to take a content area reading class. Estes and Piercey (1973) reported that 30% of the states required a content area course for secondary majors. That figure had increased to 84% by 1983 (Flippo and Hayes, 1983).

However, questions arise as to the effectiveness of such compensatory classes. Because these classes are required there is often resistance to them by students. Also, the sheer quantity of material to be taught is a problem, given that these students typically take only one three-credit-hour content area reading class. Finally, because of the pre-service nature of these classes, students usually have little experience on which to draw to help make the material presented meaningful. Given these issues, questions have been raised concerning the attitudes of these students once they become teachers.

Researchers have measured attitudes of teachers concerning the teaching of reading in the content areas. Usova (1979) surveyed teachers, principals, and reading specialists on their attitudes toward incorporating reading techniques in their teaching. He found that teachers' attitudes were less positive than either principals or reading specialists. Lipton and Liss (1978) reported results indicating that the attitudes of teachers in content groups differ significantly. English and social studies teachers had significantly better attitudes toward integrating reading strategies into their classroom than science, math, physical education, and art teachers. O'Rourke (1980) found similar results. He reported that English teachers had significantly better attitudes than math, science, and social studies teachers.

In summarizing, O'Rourke raised an interesting question when he asked if positive
attitudes toward teaching reading in the content areas would translate into the use of better strategies that would produce higher achievement by children.

The purpose of this study was to measure the attitudes of content area teachers in middle through senior high school who had previously taken a content area reading course. An attempt was also made to determine if the content area taught affected the attitudes of teachers. Finally, this study measured differences in attitudes based on the teachers' years of experience after taking a content area reading class.

**METHOD**

**Subjects**

The subjects for this survey were former pre-service students who had taken a content area reading class at a large, urban, four-year college and were now teaching in middle, junior, or senior high schools. A questionnaire was sent to 325 of these teachers. Ninety questionnaires were returned as undeliverable. Of the remaining 235, 105 were returned.

**Questionnaire**

The questionnaire consisted of four subscales containing a total of 30 questions, plus a section of demographic data. This instrument was a modification of one used by Stieglitz (1983) and used a seven-point Likert scale.

The first subscale of the survey dealt with Issues in Content Area Reading (Issues) and contained seven questions which were both positive and negative. The second subscale contained five questions, both positive and negative, and dealt with the perceived Benefits of the Content Area Reading Course (Benefits). Subscales three and four contained nine identical questions. Subscale three dealt with the Use of Content Area Reading Strategies (Use) and asked teachers if they used any of the specific strategies taught in the course. Subscale four dealt with the Significance of Content Area Reading Strategies (Significance) and asked teachers to indicate the significance or importance of these strategies. To measure internal
Data Analysis

Overall mean scores for the entire sample were computed for each of the subscales. In order to determine if there were attitude differences among content area groups, areas were combined based on the amount of reading (large, medium, or small amount) expected in a typical content area class. This resulted in combinations of English and social studies, science and math, and physical education, music, and art, respectively. Precedent for these groupings has been established by Dupuis and Askov (1978) and Lipton and Liss (1978). For the analysis concerning years of teaching experience after taking a content area class, subjects were divided into groups having three-years-or-less teaching experience or more-than-three-years teaching experience.

Total point scores were computed for each of the four subscales and only questionnaires with answers for each question on a particular subscale were included for the various analyses. One-way analysis of variance or t-test were used to evaluate the data for the various groups. Negative statements on the Issues and Benefits subscales were recoded for these analyses. Level of significance was established at .05 and follow-up pairing and comparisons were made using the LSD technique.

RESULTS

Overall Attitudes

The overall mean values for the entire sample for each of the seven-point subscales indicated that attitudes were positive, but not overwhelmingly so. The mean values for the Issues (4.9), Benefits (4.6), and Use (4.4) subscales were between average and slightly above average. However, the mean on the Significance subscale (5.7) indicated that the respondents felt the practices were of above average importance. This was in significant contrast to the overall mean value on the Use...
Evidently, the respondents felt that the strategies were important even though they did not often use them.

**Group Attitudes**

The one-way analysis of variance of the Issues subscale for groups revealed a significant main effect, $F(2.45)=4.01$, $p=.02$. Follow-up comparison indicated that the English/social studies group score was significantly higher than both the science/math and music/art groups (5.4, 4.7, and 4.4, respectively). The science/math and music/PE groups were also significantly different from one another. This indicated that those teachers whose subject matter necessitated more reading felt that content area reading was more important. This trend did not continue on the Benefits subscale. The one-way analysis of variance of this subscale was not significant, $F(2.45)=1.98$, $p=.15$, which indicated that the scores of the English/social studies, science/math, and PE/music/art groups (4.9, 4.6, and 4.0, respectively) were not significantly different from one another. On the Use subscale the one-way analysis of variance revealed a significant main effect, $F(2.37)=5.43$, $p=.01$. Follow-up pairwise comparison indicated that the English/social studies, science/math, and music/art groups were significantly different from one another (4.8, 4.3, and 3.5, respectively). This trend continued on the Significance subscale where a significant main effect, $F(2.37)=4.21$, $p=.02$, was indicated. Here, however, the English/social studies group was significantly different from the science/math and music/art groups (5.8, 5.2, and 5.0, respectively).

**Teaching Experience**

The $t$-test on the Issues subscale, $t(1.47)=3.03$, $p=.09$, for years of experience after the content course was taken was not significant. This indicated that although the mean score for the three-years-or-less group (5.2) was higher than the mean score for the more-than-three-years group (4.6), the difference was not significant. This trend continued on the Benefits subscale with $t(1.47)=.83$, $p=.37$. Once again,
mean scores for the three-years-or-less (4.8) and more-than-three-years (4.5) groups were not significantly different. The t-test for the Use subscale, \( t(1.37) = 4.05, p = .05 \), indicated that the three-years-or-less group (4.9) was significantly higher than the more-than-three-years group (4.1). Finally, the t-test for the Significance subscale indicated a non-significant effect, \( t(1.37) = 1.70, p = .20 \). Although the difference was not significant, the trend was similar to that seen on the other subscales with the mean score for the three-years-or-less group (5.8) higher than that of the more-than-three-years group (5.4). The trend indicating that the less experienced group had a better attitude overall than the more experienced group runs contrary to the effect one might expect. As the teachers in this survey gained more experience, the less important they felt content area reading was. Interpreted differently, the farther in time these teachers got from a content course, the less valuable they saw content area reading strategies.

DISCUSSION

The results of the overall sample indicated that these teachers had positive attitudes toward content area reading. However, these attitudes do not seem strong enough to initiate use of reading strategies in their classrooms. As might be expected, there were differences in attitudes of content area teachers based on the subject matter taught. Teachers whose students were expected to read the most placed the most value on content area reading strategies. Of great interest were the responses comparing the groups based on years of teaching experience after a content area reading course was completed. These results consistently indicated that the less experienced group had better attitudes than the more experienced group. This data provides information most damaging to the pre-service model of teaching and may indicate a need for more widespread implementation of the in-service model developed by Dupuis, Askov, and Lee (1978). In this model university faculty worked for one year in an in-service program with content area teachers. The results of this program indicated a significant improvement in the attitudes of these teachers. Perhaps
this model can be used to renew teachers' commitment to content area reading strategies.

Finally, the question raised by O'Rourke remains. Do more positive attitudes toward content area reading strategies lead to increased learning? This study did not attempt to answer the question. Further research is necessary to determine if this is so.
BIBLIOGRAPHY


Usova, G. M. "Comparing Attitudes Toward Reading Instruction Among Secondary Principals, Reading Specialists, and Content Area Teachers." Reading Improvement, 1979, 16, 169-174.